

### Michigan BioDiesel LLC Facts

- 10 Million gallons
  - 29,000 gallons per day 24/7
- 22 Employees
- Agricultural Processing Renaissance Zone
- 1 Million gallons Glycerin as Co-Product
- 1 Million gallons Methanol annual usage



### MBD Limited Liability Company

- 72 Members/Investors
  - Over 50% Farmer Owned
  - \$4,250,000 Raised Capital
  - Max 10% any one person
  - · Weighted vote based on investment level
- 7 person Board of Managers
  - Chairman
  - Vice Chairman
- General Manager at plant reports to the Board
- Hire secretarial services for board meeting minutes
- Members and then Board has met nearly every Thursday morning 7:00am since March 05
- All meetings open to membership with minutes distributed after board approval



### Business Organization Challenges

- 72 People with Money on the Line
- Structure to Make Decisions
- Delegation of Responsibilities
- Communication is Critical takes time
- Future Business Directions
- Dominating Personalities
- Staying Focused on Task
- Questions of Motives and Trust

#### Investment

- \$4,250,000 Raised Capital
- \$4,500,000 Borrowed Funds
  - LaSalle Bank
  - USDA Loan Guarantee 90%, (time lag)
- Start Up Business, New Industry, New Technology
- No one person or entity responsible
- Difficult to secure financing despite
   50% owner Equity



### Capital Expenditure

Building 2.50 Million

Machinery 4.80 Million

Operating <u>1.45 Million</u>

Total8.75 Million

- Plan for Worst Case Cost Overruns then 2X
- Slow Start Up 6-9 months later than originally planned
- Delay of shipments, technology changes,
- Takes Huge Operating Dollars









### How MBD Project Got Started

- '03-04 Capital Area Innovative Farmers
- '04 Grant to Buy and Distribute B100
- '04 Contact with BioDiesel Technology provider
- Winter '05 Detailed Financial Projections with Estimated Capital Cost & Breakevens
- Summer '05 Worked with MDA on Feasibility Studies
  - Soy Crush Plant
  - BioDiesel Production Plant
- '05 June Started Raising Money
- Marketing Strategies, Business Plan
- Oct '05 Plant ordered
- April '06 Construction Began





#### Government Incentives

- B100 Blenders Credit
  - \$1.00 per gallon
  - 2005 Energy Bill
- Income Tax Credits
  - 10 cents per gal Biodiesel
- Biodiesel Producers Incentives
  - Up to \$1.60 per gal B-100
  - 2002 farm Bill expires 2006
  - Some discussion 2002 Farm Bill Extension



### Why the Public Interest

- Energy Prices
- Domestic Supply of Fuel
- Green Fuel
- Renewable Fuel
- Health Benefits
- Environmental Benefits
- Stimulate Local Economy and Jobs
- Helps Agriculture
- Replace Sulfur for Lubricity

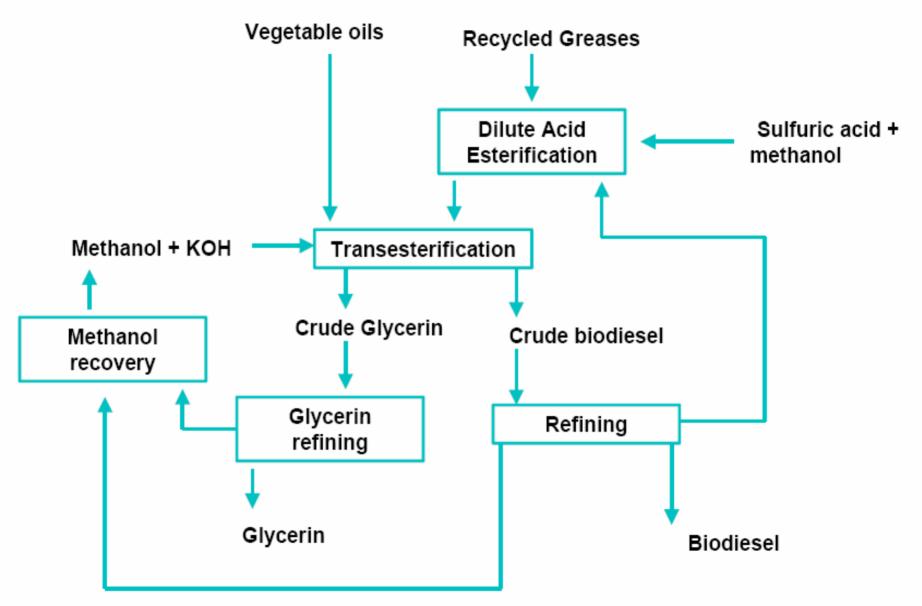
#### **Biodiesel**

- 1. Reduces sulfur emissions, engine maintenance cost, odors and CO2
- Reduces air toxics and carcinogenic compounds associated with distillate exhaust
- 3. Renewable, recyclable
- Sulfur Oxide emissions reduced by 83% (B20)
- 5. Extends distillate supply pool

#### Biodiesel

- 1. Higher Cetane
- High Lubricity (300 HFRR), High Frequency Reciprocating Rig, accepted ASTM test standard
- 3. BTU Content (128,000 comparable to kerosene)
- Cold Flow (5-7 degrees F > for soy based B20)
- 5. Flash Point degrees (>300 F vs 117 F)
- 6. Safety Health test confirm 10x less toxic than table salt
- 7. Virtually sulfur free
- 8. Fuel efficiency same as #2 diesel

## Basic Technology



### 12 year Monthly #2 Diesel



## 12 year Monthly Soybean Oil



#### Site Requirements & Considerations

- Local Political Environment
- Labor Force
- Ag Renaissance Zone
- Local and State "Cost of Doing Business"
- Location/Accessibility to Feed Stock
- Location to Markets
- Class A Roads
- Rail
- Natural Gas
- 3 Phase Power

### Bangor Public Acceptance is High









#### DAY HEATING OIL (HOK7) 2 Print Symbol: HOK7 Go Future Symbol Search | Symbol Lookup Historical Chart | Chart | Options | Futures Chain Current Month: HOK7 Last: 1.6818 | Chg: -0.0289 | Open: 1.6900s | High: 1.6910 | Low: 1.6730 prev | next 2.35 2.30 2.25 May 07 3/11/07 2.20 2.15 2.10 2.05 2.00 1.95 1.90 1.85 1.80 1.75 1.70 1.65 1.60 1.55 1.50 50K 20K 15K 25K 10K 5K Feb-28 Apr-13 May-28 Jul-11 Aug-24 Oct-06 Nov-21 Jan-03 Feb-16

#### Feedstock Conversion Cost

- Bean Oil Futures @ 31.0 cents
- Degumed & Delivery 2.0 cents
- Cost to Biodiesel Plant 33.0 cents
- -7.49 Lbs/gal = \$2.47
- Conversion Cost = \$0.48
- Total Cost \$2.95/gal
- Blenders Credit \$1 <u>\$0.85</u>
- Net competitive price \$2.10/gal
   (Whole Sale Price Before Taxes)

#### Michigan Biodiesel LLC Investors Diversities:

- Petroleum and Diesel Fuel Distributors
- Vice President Michigan Truckers Association
- Highly Published Agriculture Economists
- Township Supervises, Officials of Zoning, Planning Commissions
- A processor and exporter of agricultural products
- Manager of Commercial Elevator
- Vegetable Produce Farm Enterprise
- Extension Specialist, Economic
- Commercial Spray Applicator
- Three Engineers (Architectural, Civil)
- Seed Company, Vice President, and various sales personnel
- Financial Officer Non Ag Commercial Business
- Commodity Broker Board Member
- Seed Producers: soybeans, wheat
- Professors, Teachers
- Livestock Producers Swine, Beef, Dairy, Sheep, Goats
- Crop Producers corn, soybeans, wheat, hay producers
- Risk managers, Commodity Marketers
- Specialty Crops: Oats, Adzuki Beans, Maple syrup, Forestry-Hardwoods, Christmas Trees, Nursery Stock & Sod

#### Thank You!

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